UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,896	05/01/2001	Richard Hayton	CTX-064	5902

21323 7590 10/05/2004	EXAMINER
TESTA, HURWITZ & THIBEAULT, LLP	CAO, DIEM K

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2126	

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DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/846,896	HAYTON ET AL.
	Examiner	Art Unit
	Diem K Cao	2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>01 May 2001</u>.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-48</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1,3-14,17-19,22-24,26-34,40-42 and 45-48</u> is/are rejected.
7) ☒ Claim(s) <u>2,15,16,20,21,25,35-39,43 and 44</u> is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>3/4/02 & 3/31/03</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-48 are presented for examination.

Allowable Subject Matter

2.   Claims 2, 15-16, 20-21, 25, 35-39, and 43-44 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

3.   Claims 12-14 would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of

the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

5.   Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

Claim 12 recites the limitation "the step of re-mapping" in line 1. There is insufficient

antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claims 1, 6-11, 17-18, 22-24, 29-34, 40-41, and 45-48 are rejected under 35 U.S.C.

103(a) as being unpatentable over Burd et al. (U.S. 6,792,607 B1) in view of Marcos et al. (U.S.

6,429,880 B2).

8.   **As to claim 1**, Burd teaches an application having a plurality of objects (server-side

control objects; col. 5, lines 1-25), at least one object having a property (the server-side Control

class ... properties and events; col. 19, line 58 – col. 20, line 2), each property being identified

with an identifier (page:tablelist1:listrow2:label1; col. 14, lines 49-54), associating the element

of the user-interface with a property path (one or more server-side control objects map to one or

more user interface element; col. 6, line 66 – col. 7, line 2 and Operation 508 parses the payload

... for processing; col. 14, lines 49-65), the property path including a concatenation of a plurality

of identifiers (page, tablelist1, listrow2, label1; col. 14, lines 49-54), the concatenation of

identifiers defining a path through the objects of the application to a property at the end of the

concatenation (the property values of server-side control objects or corresponding data, i.e.,

"12945"; col. 14, lines 49-67 and Figs. 6-7), mapping the property path to a current state of the

property at the end of the path defined by the concatenation of identifiers, to associated the

element of the user-interface with the current state of that property (a unique identifier and corresponding data; col. 14, lines 49-58 and Figs. 1, 6, 7).

9.   However, Burd does not teach components. Marcos teaches components (components; col. 9, lines 35-51).

10.   It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Burd and Marcos because it provides a method for binding user interface objects to application objects, and both objects or components are software objects that provide properties and methods to act on the properties, and it is easier for developers during application creation and maintain.

11.   **As to claim 6**, Burd as modified teaches monitoring a plurality of states within the application to detect a change in one of the states (server side control objects can ... registered for those events; col. 10, lines 60-67), each state in the plurality corresponding to one of the states mapped to an identifier in the concatenation of the property path (one or more server-side control objects map to one or more user interface element; col. 6, line 66 – col. 7, line 2 and Operation 508 parses the payload ... for processing; col. 14, lines 49-65, page:tablelist1:listrow2:label1; col. 14, lines 49-54, a unique identifier and corresponding data; col. 14, lines 49-58 and Figs. 1, 6, 7).

12.   **As to claim 7**, Burd and Marcos do not teach receiving a property change event from a

JavaBean-compatible component. Burd teaches receiving a property change event from a server-

side control object (col. 10, lines 60-67), and Java programming language can be used (col. 9,

line 66 – col. 10, line 2). It is well known in the art that JavaBean is a product of Sun, and it

would have been obvious to apply Java technology to the system of Burd and Marcos because

Java provides a platform independent application.

13.   **As to claim 8**, Burd does not teach re-mapping the property path to a new current state in

response to detecting the change in one of the states of the plurality of states. Marcos teaches a

GUI element can be bound to a variable, method or constant (col. 4, lines 21-22), a dynamic

element is an element that is replaced with dynamically generated HTML at runtime (col. 7, lines

1-2), and the system also automatically identifying and displaying all the possible variables that

are available for binding to a definitional element (col. 11, lines 61-64). When a variable for a

definitional element is changed during runtime, the path to a new value of the new variable also

changed.

14.   **As to claim 9**, Burd does not teach re-mapping the identifier the concatenation of

identifier to the changed state in response to detecting the change in one of the states of the

plurality of states. Marcos teaches a GUI element can be bound to a variable, method or constant

(col. 4, lines 21-22), the system also automatically identifying and displaying all the possible

variables that are available for binding to a definitional element (col. 11, lines 61-64), and the

value attribute of the HTML INPUT element in the component is bound to the aGuest.name

variable in the component's script, wherein aGuest.name is the identifier to the variable. When a

new variable or method is bound to the GUI element, a new identifier is replaced in the property

path to reflect the change in state.

15.   **As to claim 10**, Burd as modified teaches generating a property change message in

response to a change in a state of a property corresponding to one of the identifiers in the

concatenation of the property path (server-side objects can raise server-side events to non-user-

interface server components registered for those events; col. 10, lines 60-63).

16.   **As to claim 11**, Burd as modified teaches updating one or more user-interface elements

associated with the property path with a new current state in response to a change in the current

state of the property (e.g. col. 10, lines 56-67 and col. 15, lines 41-46).

17.   **As to claim 17**, Burd as modified teaches dynamically binding the property path to one

of the application components including the property corresponding to the current state mapped

to that property path (The HTTP request ... dynamic content resource; col. 8, lines 15-23, col. 9,

lines 53-62, and col. 10, lines 14-17).

18.   **As to claim 18**, Burd as modified teaches transmitting to the application a request to

update the current state of the property mapped to the property path associated with the element

of the user-interface in response to a user modification of the value (e.g. col. 8, lines 30-36 and

col. 10,lines 60-67).

19.   **As to claim 22**, Burd as modified teaches registering interest in the property path (e.g.

col. 15, lines 1-20 and col. 10, lines 60-63).

20.   **As to claim 23**, Burd as modified teaches the step of mapping further comprises mapping

one of the identifiers in the concatenation of the property path to a state of a property

corresponding to the one of the identifiers (See Fig. 1, 6-7, page:tablelist1:listrow2:label1 and a

unique identifier and corresponding data; col. 14, lines 49-58).

21.   **As to claim 24**, it is the same as the method claim of claim 1, except it is a computer

system claim and is rejected under the same ground of rejection.

22.   **As to claims 29-34**, see rejections of claims 6-11 above.

23.   **As to claims 40-41**, see rejections of claims 17-18 above.

24.   **As to claims 45-46**, see rejections of claims 22-23 above.

25.   **As to claim 47**, Burd as modified teaches the client node including a user interface

having one or more elements (Fig. 1). However, Burd does not teach the client node including a

client portion of the property connector module. Marcos teaches the client node including a

client portion of the property connector module (component window; col. 9, line 30 – col. 10, line 19).

26.   **As to claim 48**, Burd as modified teaches the server node including the application, and a server portion of the property connector module (server-side class control library; col. 6, lines 62-66, non-user-interface server component 130; col. 7, lines 46-48).

27.   Claims 3-5, 19, 26-28 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burd et al. (U.S. 6,792,607 B1) in view of Marcos et al. (U.S. 6,429,880 B2) further in view of Turner et al. (U.S. 2001/0018648 A1).

28.   **As to claim 3**, Burd and Marcos do not teach the step of mapping the property path to the current state further comprises mapping the property path to an undefined state if no property is found that corresponds to an identifier in the plurality of identifiers in the concatenation. Turner teaches a property of a component may not be required (section 0167; page 7 and section 0176; page 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Burd, Marcos and Turner because it provides a method to reduce the time of application development by providing a design tool for assembling component objects to form an object-based computer system application.

29.   **As to claim 4**, Burd and Turner teaches generating a node tree having a plurality of

nodes, wherein each node of the node tree represents a mapping of an identifier to one of a state

of a property and an undefined state (See fig. 7 and rejection of claim 3 above).

30.   **As to claim 5**, Burd teaches the node tree represents a plurality of property path

(page:tablelist1:listrow2:label1; col. 14, lines 49-54 and Fig. 7).

31.   **As to claim 19**, Burd and Marcos do not teach inhibiting a property change message in

response to the application updating the current state of the property in response to the request to

update (If the user supplies a new value ... take the new value; section 0578, page 22).

32.   **As to claims 26-28**, see rejections of claims 3-5 above.

33.   **As to claim 42**, see rejection of claim 19 above.

Conclusion

34.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

-   Emmelmann (U.S. 2003/0074634 A1) teaches a method to create server side Internet

    application by placing interactive server side components on Internet pages.

-   Krishnaswamy et al. (Tapestry Developer's Guide) teaches a component-oriented Java

    web application framework.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Diem K Cao whose telephone number is (703) 305-5220 or (571)

272-3760 (effective November 1st 2004). The examiner can normally be reached on Monday -

Thursday, 9:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (703) 305-9678 or (571) 272-3756 (effective

November 1st 2004). The fax phone number for the organization where this application or

proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
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